

WORKING BOATS

October 2019



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Balance for better

Port of Brisbane

Breaking down barriers

F.R.8

Sharon McNally
Bareboating in safety

Ashleigh Morton

Destined for the sea



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Front cover image

Aye Aye Captai

Image used with permission: Joni Denni

Message from the CEO

In this edition of *Working Boats* we celebrate women in the maritime industry. All around Australia, and the world, there are highly skilled women seafarers working aboard commercial vessels; however, they remain a very small percentage of the overall maritime workforce.

Many organisations acknowledge that improving workplace diversity is not just the right and fair thing to do—it also increases productivity and creates better business outcomes. Having a diverse workforce encourages a variety of views, approaches and solutions, and benefits overall staff morale and retention. In the maritime sector, these strengths from gender balance can be harnessed to drive operational safety and productivity.

AMSA is working toward a target of 50 per cent women in our workforce and 50 per cent of women in our managerial team by 2025. Many of the stories about safety in this edition have come from the women in AMSA.

We also hear from a range of women working in the maritime industry. Jillian Carson-Jackson talks about the benefits of gender equality in the workplace; Sharon McNally walks us through how their bareboat operation ensures safety for clients; and we hear about Ashleigh Morton's pathway into the maritime industry. We also speak to the Port of Brisbane—which has firmly set its sights on drawing women into the maritime industry—about the launch of their women cadetship program.

Achieving gender balance in the maritime industry—one of the most male-dominated industries in the world—is going to take a coordinated and conscious effort from all parts of industry. This year's International Maritime Organisation World Maritime Day theme *Empowering Women in the Maritime Community*, is an opportunity for us all to consider what we can do to encourage, support and learn from women in our maritime industry.

Mick Kinley

Chief Executive Officer

Working Boats October 2019

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Destined for the sea

Ashleigh Morton's love of boats and the sea is ocean deep.



Aground on Daw Island

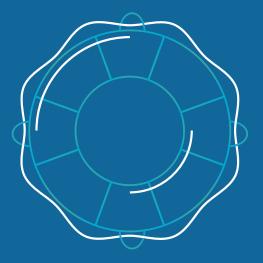
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Report maritime incidents directly to AMSA in two simple steps



1. Alert AMSA* as soon as practicable when a serious incident has occured

Serious marine incidents include:

- · death or serious injury to a person
- loss of a person overboard
- loss of, or significant damage to, a vessel.

*You can submit an incident alert by phone, email or online.

2. Submit an incident report – within 72 hours

This gives us detailed information about the incident and mitigation measures.

Form 19 - Incident report

Other types of marine incidents you need to report:

- fire
- · loss of stability
- fouling of a vessel
- a close quarters situation
- any event that could impact the safety of a vessel, those on board or nearby.

Submit forms at amsa.gov.au or email completed forms to reports@amsa.gov.au

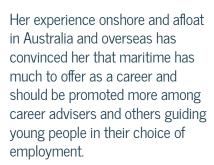




Championing diversity

Jillian Carson-Jackson has spent more than 30 years pioneering significant change in the global maritime scene, championing diversity and the widespread benefits of attracting more women to the industry.

By Peter Strachan



'It provides wonderful career opportunities, but it does not get the attention I believe it should, compared with many other industries,' Jillian said.

The industry gets even less promotion to women than it does to men, but this is changing and we need to ensure this trend continues.'

When Jillian started her career with the Canadian Coast Guard as a navigation officer cadet and graduate of the Canadian Coast Guard College, she was something of a rarity afloat.

There are more of us now and the future is looking considerably brighter as the industry comes to realise what having men and women more equally represented brings to virtually every aspect of what we do,' Jillian said.

'Diversity, including gender diversity, strengthens the decision-making process because we have different strengths,' she said.

Embracing diversity results in greater safety on board and quality of life for all of us. It benefits marine operators, VTS personnel, ships crews and those we serve both afloat and ashore, around the world.'

Jillian has no hesitation in recommending maritime careers to women, but stresses the need to ensure the opportunities continue to develop for them.

'We have to better promote the industry to women who may not even be aware of the industry as a career option. We must make sure we have in place an environment that makes it more likely to attract, and retain, women,' she said.

There is also a need to support women, and men, through career transitions, including the transition from sea to shore, to maximise benefits not only for them, but also the wider industry.



'We have to better promote the industry to women who may not even be aware of the industry as a career option.'

— Jillian Carson-Jackson

There is plenty of room to increase the number of women in maritime and we must not lose this opportunity as an industry. The benefits of diversity are proven to pay great dividends, which more than justify the effort.'

Jillian's experience includes time spent with AMSA, working in vessel tracking and management of coastal pilots. Currently, as the Vice President of the Nautical Institute, Jillian's working knowledge of the industry positions her perfectly to advocate for gender diversity, including the WiM 365 challenge, to post a #womaninmaritime profile on Facebook and Instagram each day in 2019.





Aye aye captain

A striking portrait of two women sea captains has won the industry's prestigious ANL Maritime Art Award for Melbourne artist Joni Dennis.

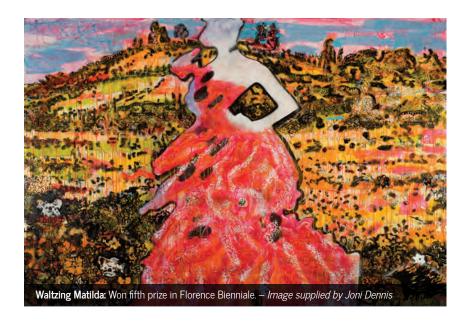
By Peter Strachan

Aye Aye Captain: Winner of the ANL Maritime Art Award. – Image supplied by Joni Dennis.



'I chose these two women because I liked their steely composure. They were attractive, in control powerful.'

- Joni Dennis



Joni's \$15,000 prize is for an essentially black-and-white canvas of Carpil State and lonela Butoi. Joni produced the work in June last year and entered it under the theme *The relationship of humanity and the sea.*

Joni told *Working Boats* her art focused on the empowerment of women and that her discovery of women working as captains of container ships was incredibly exciting.

I chose these two women because I liked their steely composure,' she said. They were attractive, in control—powerful. I am still amazed at the power they exude.'

Initially, I didn't think they would be in the same picture, but as the work progressed it dictated the direction. I found having the two of them together added to the empowerment of women.'

The only colour Joni used in the work was the gold decoration on the shoulders, providing a strong, eyecatching contrast to the half tones used in the rest of the artwork.

'Black and white reflects the women's resolve. Colour would have sexualized and disempowered them. Even a soft tint on the lips would have destroyed the energy,' Joni said.

I use black and white images with gold for all my female portrait images. Women have been idolised in religious paintings throughout history and gold leaf has been used to depict that adoration—gold reflects reverence and respect.'

Joni studied graphic design at Monash University, Caulfield, focusing on photography, painting, pottery, illustration, life drawing, lithography etching and graphics.

'Initially I worked in publishing, designing book covers, before moving on to being an art director in advertising,' she said.

I used to spend most weekends working on large paintings on canvas. I found the challenge to create art exciting, addictive and meditative.'

Joni has been into art for as long as she can remember, but her interest in painting women was sparked with her painting *Waltzing Matilda* (2011). Waltzing Matilda—which depicts a woman waltzing in the Australian landscape—drew her into competition with 450 artists from around the world at the Florence Biennale, earning her fifth prize.

'I received an offer from a hotel chain in Italy and an invitation to exhibit from a local gallery,' she said.

'After this exhibition, I took a great interest in women and their empowerment. When I considered entering the ANL award, I wanted my entry to align with this interest, so you can imagine my excitement when I learnt of the women captains.'

Joni is planning more maritime works featuring women in groundbreaking roles

jonidennis.com.au



A pioneering program introduced at the Port of Brisbane is creating new opportunities for women to forge a career in the maritime industry.

By Simon Enticknap

Like many workplaces in the maritime sector, the workforce at the Port of Brisbane has traditionally been heavily skewed towards male participants.

The Port of Brisbane has recognised the importance of creating a more diverse workforce, to better understand and meet the needs of today's customers and stakeholders. Seeking to achieve this goal and overcome gender barriers to entry, last year they launched a new cadetship program aimed at encouraging more women to join the workforce.

The first of its kind in Australia, the cadetship offers a 24-month paid employment and training program for women working as deckhands in the Port of Brisbane Marine Operations team.

With just six women from hundreds of men applying for a marine role in the last decade, we made a decision to disrupt traditional recruitment methods to accelerate a change in our workforce gender profile,' explained Port of Brisbane Chief Operating Officer Peter Keyte.

'We wanted to challenge misconceptions about the opportunities available within our industry, the nature of the work and the skills and perspectives required.'

This process of change has involved addressing known impediments to employment that often deter more women from considering a career in the industry.'

We have specifically created opportunities to attract a diverse range of talented women into our business, starting with breaking down some of

the barriers for interns, graduates and cadets.' Peter said.

'We've changed the way we advertise vacant positions and promote our business as an employer of choice for women—including the images we use in our advertisements, and where we advertise roles. We also share the career journeys of women in our business to raise awareness of the fact that women can enjoy a rewarding career in maritime.'

Following the inaugural open day for the cadetship program in June last year, four women were selected for the first intake out of 150 applications received from across Queensland, interstate and even overseas.

No specific industry skills are required from prospective candidates, but they are expected to enjoy working outdoors



'We have specifically created opportunities to attract a diverse range of talented women into our business.'

- Peter Keyte

as part of a small team, be interested in learning new skills, and show a commitment to putting in the extra time and effort needed to gain qualifications and complete their training.

A key aspect of the program is creating the right environment in which women can feel supported in their role as they develop practical skills and gain experience.

Make no mistake, this is a hands-on role and the women are expected to perform all the necessary deckhand duties including maintenance, safety management and cleaning while learning about the port's operations.

'During the two-year cadetship, the cadets are trained and mentored in all aspects of the port's operations, including learning first-hand from experts in the field. They acquire hands-on experience in dredging, berth-levelling, maintenance and vessel inspections, as well as learning how to operate a class C6 crane,' Peter said.

'The cadets also take part in the company's mentorship program which

is designed to support the growth, development and inclusion of people new to the industry.'

By the end of the program, cadets are expected to gain a master under 24 metre (near coastal) and marine engine driver grade 3 qualifications.'

Although there is no guarantee of a future role at Port of Brisbane at the end of the cadetship, the qualifications and job experience they gain during the cadetship will lay the groundwork for a career in the industry, and the opportunity to apply for any positions that become available.

Initiatives like the Port of Brisbane cadetship program are in line with the objectives of the International Maritime Organization (IMO), which has made 'Empowering Women in the Maritime Community' the theme of this year's World Maritime Day.

This focus on addressing gender imbalance reflects the changing nature of the maritime industry and, according to the IMO, helps to drive growth and development while delivering benefits

for everyone engaged in the maritime sector.

Looking further ahead, Port of Brisbane says it will review cadet requirements prior to the next intake to determine what positions are available.

The Port of Brisbane is one of the fastest growing container ports in Australia and an important gateway for global trade in Queensland. Each year, more than 2700 vessels are berthed at the port, accounting for over 33 million tonnes in trade valued at more than \$50 billion.

In addition to the busy container and cargo terminals at the port, the Port of Brisbane is also building the nearby Brisbane International Cruise Terminal which, when completed, will be the only dedicated terminal facility in south—east Queensland capable of hosting mega cruise ships.

With growth and opportunity at the port a given, the message from the current group of cadets to other women thinking about embarking on a career in the maritime industry is 'just do it!'

portbris.com.au

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- @port_brisbane
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What does My Boat do?

My Boat is for anyone who wants a simple guide to standards for new vessels. The app cannot be used to replace an accredited marine surveyor or legal advice, but it can help you prepare for survey or make sure you are meeting vessel safety standards. My Boat is currently used over 300 times per month.

My Boat summarises the requirements for bilge systems, navigation lights, propeller shafting, and safety, navigation and communication equipment. The app can help with vessels in survey including unpowered barges, Class C restricted vessels, and non-survey vessels.

To use the app, simply insert vessel information such as service category (for example 2C or 4E), vessel length and maximum speed into the fields provided. Once My Boat has enough information to calculate a result for your vessel, a green tick appears next to the sections where the system has generated results and allows you to click through to your results. You

can view your results online or print them off for your records. If you have registered as a user—instead of using the app as a guest—you can also save your work and share vessel information with other users.

What happened to the standards tools?

My Boat encompasses all the standards tools previously available on the AMSA website. These included:

- safety equipment generator
- navigation lights and shapes requirements generator
- propeller shaft calculator.

You now only have to enter the information about your vessel into the system once to find all of this information and more.

What's next for My Boat?

New modules are added to My Boat each year. Modules will soon include include anchoring, intact and damaged stability, fire safety, as well as an update to include new requirements for float-free EPIRBs by 1 January 2021.

'The information available within the My Boat app was extremely helpful, well laid out, informative and easy to read whilst gaining a lot of useful insights.'

— accredited marine surveyor Rhett Sullivan

Help us improve

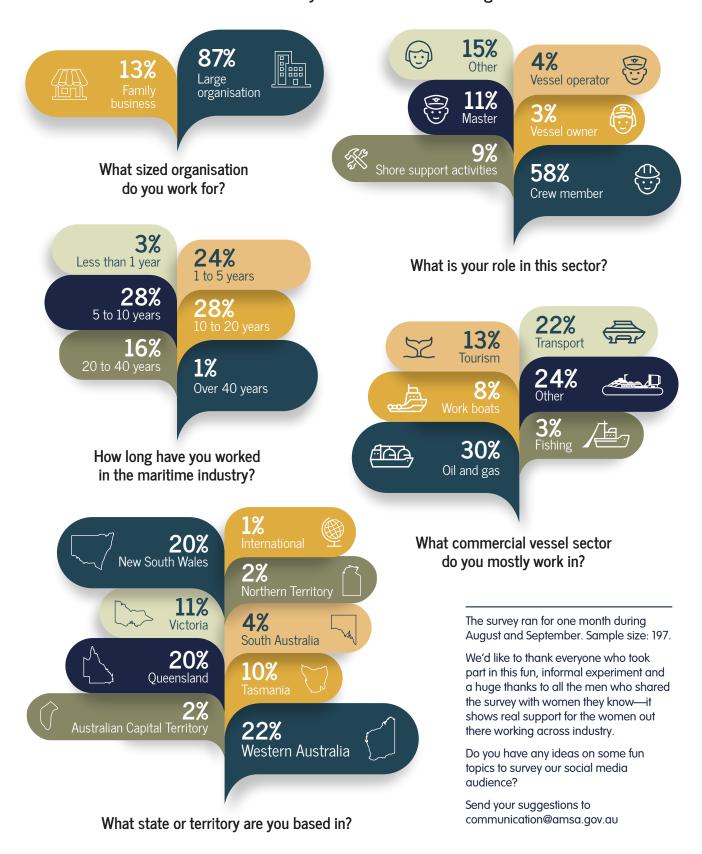
We value feedback and suggestions on the app's performance and we also seek people willing to test new features on the app.

To get involved in the My Boat project email My.Boat@amsa.gov.au

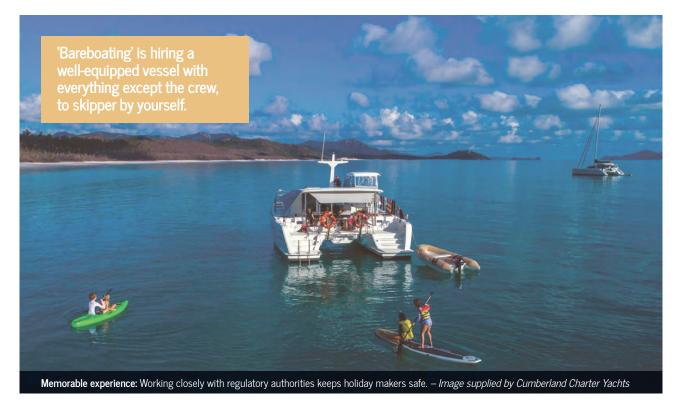
We value your feedback. My.Boat@amsa.gov.au AMSA Connect 1800 627 484

Women in industry

Recently we invited women on our social media channels to help us create a snapshot of women in the Australian maritime industry. We saw some interesting results!







Five leading operators, making up the Whitsunday Bareboat Operators Association (WBOA), have made yacht chartering a safe and appealing holiday experience for even the totally inexperienced.

Working closely with AMSA and other regulatory authorities, association members carefully assess each hirer's nautical ability and experience to ensure risks are minimised before any boat sets sail from its dock.

WBOA president and Cumberland Charter Yachts General Manager Sharon McNally, says all five companies in the group work closely together on items which affect the industry and best practice.

'We operate from Hayman Island south to Shaw Island and fiercely guard our multi-award winning reputation at Cumberland Charter Yachts,' Sharon said.

We have a fleet of 32 vessels, fully equipped with all the necessities to give maximum comfort and provide the safest possible operation for those on board,' she said.

'We work closely with state and federal bodies, including Maritime Safety Queensland and more recently AMSA, to ensure guest safety and compliant vessels.' — Sharon McNally

'Our fleet includes monohull yachts, sailing and power catamarans.

'All of our vessels meet strict Australian survey regulations. Not all vessels on the market do that. We are very selective in what works for charter, especially given we have a varied clientele, ranging from mature couples and families who just want to reconnect, through to regular boaties.'

Cumberland Charter Yachts requires all potential hirers to complete a pre-charter questionnaire before their arrival to collect any vessel. It also offers guides for hire to those with limited experience.

'Every charter hire includes a three- to four-hour briefing on board the vessel before departure with an experienced marine skipper,' Sharon said.

The brief includes the charter area, as well as the vessel and its practical components.'

'No matter how many times you have hired a boat, each vessel is different. And there are other variables. Weather and tides at the time of hiring determine different locations hirers can explore. We cover all of this for all hirers before they set sail.'

All vessels have fully equipped galleys, gas stoves, ovens and barbecues, navigation instruments, VHF radio, linen, towels, snorkelling gear and a tender with an outboard motor.

Cumberland Charter Yachts operates year-round, with its busiest season from July to November and has been chartering for more than 30 years.

In that time we've seen many changes and embraced comprehensive safe operating procedures. We work closely with state and federal bodies, including Maritime Safety Queensland and more recently AMSA, to ensure guest safety and compliant vessels,' Sharon said.



Charterers are required to contact the Cumberland Charter Yachts base each day by VHF to advise their location and get weather updates.

They must also be anchored before 4 pm and there are areas where guests must navigate only under motor to avoid running aground, Sharon said.

Each charterer must accept a hire agreement, sign an inventory and acknowledge operational regulations.'

'Operational and safety manuals are available on board and online predeparture.'

'At additional cost, we can supply fishing gear, stand-up paddle boards or kayaks—perfect for meandering the shoreline of secluded bays and beaches.'

Hirers can also arrange to meet a seaplane or helicopter and take a scenic flight.

'All we really ask is that they bring their sense of adventure and follow our easy-to-understand safety measures to ensure the experience is everything they could wish for.'

Sharon joined Cumberland Charter Yachts nine years ago in what was then a male-dominated field.

To some extent it still is, but in recent years we have seen more women getting involved,' she said.

Previously I was a travel agent in the area. As a keen dinghy sailor, hiker and scuba diver, it was the perfect opportunity to combine my love of the Whitsundays—above and below the waterline.'

As an equal-opportunity employer, Cumberland Charter Yachts also has highly qualified female briefers and maintenance crews.

Even our female reservations staff have Master 5 and Coxswains qualifications. I'd recommend it as a career for any woman who enjoys this type of work. Who wouldn't enjoy working in such a beautiful location—mainly outdoors, being part of a great team and facing new challenges every day in an excellent environment, offering so much opportunity and job satisfaction?'

Generally, charters are planned six- to nine-months ahead, but school holiday

bookings are frequently made 12 months in advance by those wanting to be sure of getting the times and craft they want.

'Our vessels are comprehensively equipped, requiring guests to bring little more than personal items—things like sunscreen, polarised sunglasses, hats with toggles, light casual clothes, a camera, fishing gear, insect repellent, beach towel and bathers,' Sharon said.

'Include some warmer gear for winter bookings and smart casual dress for resort visiting—and don't forget an old pair of sneakers or deck shoes, as well as your spirit of adventure.'

Sharon said more and more people were finding bareboat chartering a great way to safely explore the Whitsundays.

It's certainly the most affordable way as well. Once you have hired the boat, everything is included—all the best spots, snorkelling and iconic locations. Your boat is your accommodation and the view changes at each location.'

And what challenges does the Cumberland Charter Yachts team still face?

'Education. Helping potential guests understand what we have to offer up here,' Sharon said.

'We are still putting a lot of effort into education. Apart from our day-to-day sessions with hirers and our insistence of all safety protocols being followed, we attend major boat shows and advertise what we have to offer in leading boating publications. Hopefully with this insight we can reassure potential clients of the safety and ease of holidaying with us.'

ccy.com.au

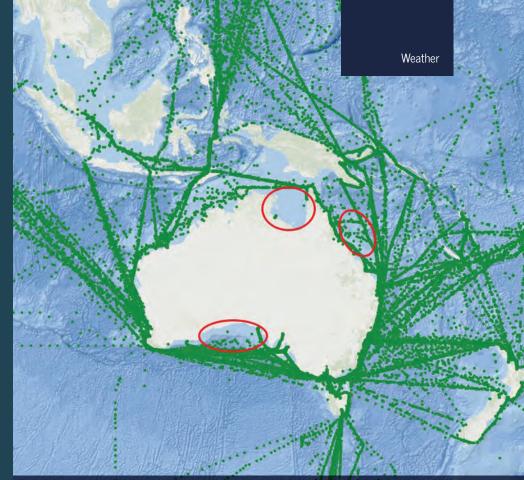
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@cumberlandcharteryachts

Help gather weather data for the global maritime community

Do you check the Bureau of Meteorology's coastal and high seas forecasts and warnings as a part of your safety preparation before heading out?



Data: In 2018, the Australian Voluntary Observing Fleet collected over 40,000 high-quality weather observations at sea. Data sparse areas are highlighted in red.

Marine weather observations play a crucial role in the preparation of the bureau's coastal and high seas forecasts and warnings. Each year the bureau issues over 18,000 marine forecasts for 78 coastal waters zones covering 37,000 kilometres of Australia's coastline. These marine forecasts are regularly broadcast on marine radio to keep people on vessels informed about approaching weather.

Although meteorological information is gathered by various means—satellites, buoys, floats and radar—vessels play a very important part in gathering information to share with others.

A network of vessels around the world records and transmits weather observations as a part of the Voluntary Observing Ship (VOS) scheme. As the name suggests, the vessels involved take part on a voluntary basis. This scheme is an international program made up of member countries of the World Meteorological Organization.

Right: Crew of the Chevron Shipping vessel, Asia Venture, presented with certificate of appreciation from the World Meteorological Organisation for regularly providing over 100 observations per month to the Australian Voluntary Observing fleet

As Australia's contribution to the VOS scheme, the Bureau of Meteorology currently operates a fleet of over 50 vessels—the Australian Voluntary Observing Fleet—that give their time to provide high quality weather observations in the Australian region.

The bureau is always looking for vessels to join the fleet, particularly vessels operating in important areas and areas that we don't receive a lot of data from—such as the Gulf of Carpentaria, Great Barrier Reef and the Great Australian Bight.

The program is open to all types of vessels, from yachts, research vessels

and fishing trawlers, to liquefied natural gas vessels and large international ships.

The bureau supplies vessels with the necessary meteorological equipment and provides regular training and support to the crew on how to record and transmit accurate weather observations.

To volunteer your vessel to be a part of the Australian Voluntary Observing Fleet, email marine_obs@bom.gov.au

Check the marine weather forecasts at bom.gov.au/marine





Women in Seafood *Australasia*

The people making up Women in Seafood Australasia (WISA) are a force unto themselves. Interspersed throughout communities around Australia, together these women are leading the way on some of the most fundamental issues affecting fishing communities around Australia and the world—mental health and the marine environment are just two of their priorities.

We asked six of these women how they view women in the seafood industry going forward.

Does being a woman in the fishing industry open doors that are closed to men?

What does the future for women in the industry look like?

Variety of seafood: Image source: iiStock.com/ElenaMedvedeva



Catherine Sayer

I don't think any doors are totally closed for anyone—male or female. My role has

been in fisheries 'governance', chairing committees at a state and federal level. As the only female in the room—at times as the chair—the dynamic is very different.

There are some very clever female industry professionals—particularly in the science, management and environmental space—who are given opportunities because they are extremely competent and, as a result, I have seen more women join my area of work. Now most of the time I'm not the only female in the room, although we still have a way to go!



Mona Barnes

The men in the industry are typically busy concentrating

on fishing and their maintenance work. As a result, they rarely have time to do much else.

I found that the door was open to me as a woman to help further develop our business by pursuing value-adding opportunities—processing crabs, filleting fish, running a shop, liaising with buyers and developing markets.

I also got involved in various community groups and found myself educating and informing people on issues relating to the industry, such as continually working on our social license and improving the reputation of the industry.

The future is bright for women in the fishing industry. Not only will they continue to support their family businesses, but now that they are being recognised for all their hard work, they are being offered more opportunities to be involved in other roles in the industry and have more of a direct impact in the future of the industry. This has come about from the

fishermen's acceptance of the value of women in the industry through the hard work of organisations such as Women in Seafood Australasia.



Dawn Jordan

I am proud of the fact that I have been elected and

appointed to positions in the Tasmanian Rock Lobster fishery for more than 30 years now.

I strongly advocate for appointments being made on merit, not gender.

While there are many qualified women in the fishing industry, we must recognise that we are a minority. However, government policy is now aiming for 50 per cent of boards to be female, which opens doors for women.

Science, marketing and management provide opportunities for women in maritime. Even women of fishing families who have traditionally 'done the bookwork' are taking on more representative roles, allowing their partners to catch the fish.



Gloria Jones

Women provide onshore support for the people actively

fishing and a huge part in organising search and rescue when needed. They are well connected in the community and have local knowledge, which is so important when working with other agencies.

Women have worked alongside men in the industry for many, many years and the future of women in the fishing and seafood industry is bright with opportunities in catching, processing, marketing, research and development, participation on advisory boards, decision making, and policy making.

Women mentoring other women have led to many of these opportunities.



Frances Bender

I'd say there is every chance doors will remain closed to women in the

aquaculture industry in general, unless women continue to exert determination, intelligence and willpower in knocking the door off its hinge. But most importantly, the door should open to the best and most qualified person, regardless of their gender, which is exactly what I promote at Huon Aquaculture.

A great future exists for women who want to have an interesting, diverse and long-lasting career in aquaculture. We employ female vets, divers, farm-hands, hatchery technicians through to accountants, human resource experts and sales executives, because we recruit the best people for our jobs.



Tricia Beatty

The seafood industry is still male-dominated and it is not an obvious career

pathway for younger women.

Leadership funds and other opportunities are available to women in our industry, but it's not enough to break through some of the old-school barriers and stereotyping around women.

Women still have a long journey to take before we can make a significant change to the stereotyping in our industry, but I strongly believe that the work of WISA has got us heading strongly and confidently down this pathway. I am proud to be a member of this group, and achieving positive change.

Women celebrate other women's achievements in this industry—we focus our attention and support on other women.



Hailing from generations of fishers, you could say Ashleigh Morton's love for boats and the sea is ocean deep. Ashleigh was just sixteen years old when she cruised the Bahamas, inspiring her to follow in her family's footsteps and pursue a career in maritime.

By Becca Posterino

Born in Port Hedland in Western Australia, fishing, diving and crabbing were an integral part of life for Ashleigh. Some of her fondest memories were setting off in a friend's dingy to snorkel in Exmouth on Ningaloo Reef, exploring and fishing around Finucane Island off Port Hedland and wakeboarding behind jet skis. For Ashleigh, the ocean is her playground.

After graduating from high school in Geraldton, Ashleigh moved back to Port Hedland where she barely knew a soul.

I knew I wanted to work on the water and I decided that there was no better way to build my skills and meet people than to become a marine rescue volunteer,' Ashleigh said. Her first taste as a marine volunteer was with Marine Rescue Port Hedland. She was then offered a maritime cadetship with the Leeuwin Ocean Adventure Foundation, a not for profit youth development organisation based in Fremantle. Maritime cadetships involve a year at sea on the Sail Training Ship *Leeuwin II*, learning the craft of seamanship under the guidance of Leeuwin's crew, and study to gain the qualifications needed to gain entry into the maritime industry. Sponsored by Rivtow to complete the cadetship, Ashleigh hasn't looked back since.

As a young woman and cadet she's built up her confidence on the water, and leadership skills while on board the majestic STS *Leeuwin II*. Every day is varied and exciting, although she says routine is also critical for the crew and usually starts before sunrise.

Each day begins with early morning exercises including a warm-up—stretching and even some dancing! After breakfast we clean the ship, and depending on the voyage, either set or hand (stop using) sail,' she said. But for Ashleigh, night watch—which usually involves up to ten crew members in groups of three or four rotating throughout the night—is a definite favourite.

'When you're standing on watch you're at the helm. One or two people are on bow watch while the rest of the group keep watch and chat. It's a great way to get to know your crew mates and see some amazing sights,' she said.

Some of her highlights have been seeing marine life up close in their natural habitat, including dolphins, sharks, whales and even a dugong.



'It's a good feeling knowing that you can help people and achieve your dreams and goals at the same time.'

— Ashleigh Morton

Being a part of the crew aboard the STS *Leeuwin II* has also had its more unorthodox moments.

'One of the most unusual tasks I have done was dropping eggs fixed tightly packed within recycled and biodegradable material off the main mast, 30 metres off the deck,' she laughed.

The exercise is designed to test problem solving and initiative, working in a team to design an aerodynamically engineered craft to land the eggs on the deck unharmed.'

Ashleigh also recognises how challenging it can be for a young woman at times working on boats, particularly because of the physical nature of the work.

'It's a male-dominated industry, and most of my crew mates don't have trouble with the physical aspect of the work. For me it's a challenge because of my height and strength—I'm only four-foot nine,' Ashleigh says.

But in spite of the obvious challenges, Ashleigh has discovered skills beyond her physical limitations.

'When I climb up the mast and go out onto the yard, I struggle to stand off the foot ropes. So I've learnt to time my movements...eventually learning different tactics to keep my balance,' Ashleigh said.

Ashleigh recalls a particularly confronting experience while she was a deck hand aboard *Iron Pride* as a volunteer for Marine Rescue Port Hedland. In 2018, she took part in a

rescue of three men and three children, off Finucane Island near Port Hedland.

'It was pretty scary—their dingy took on water and we found them stranded on the island at low tide. We couldn't get to them on the air rider so we eventually launched the responder and managed to get them all safely to shore,' Ashleigh recalls.

Beyond these moments where lives are at stake, she said these encounters provide a profound sense of purpose.

'It's a good feeling knowing that you can help people and achieve your dreams and goals at the same time,' Ashleigh says.

Ashleigh is grateful for the opportunities her cadetship with the Leeuwin Ocean Adventure Foundation has given her. She has received valuable mentoring and developed key technical skills.

Ashleigh is currently completing her Master < 24 metres, Marine Engineer Driver Grade 2 and STCW-95 and she's looking ahead, wanting to gain as much experience on board vessels as possible—and eventually become a captain on a cruise ship.

At the age of nineteen, Ashleigh's goals are firmly set for a life on the water and her unique tenacity and determination will no doubt see her dreams set sail, well into the future.

Leeuwin Ocean Adventure Foundation sailleeuwin.com

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1. Eyes on the job

When navigating out on the water, the best way to prevent a collision or grounding, is to keep a good lookout at all times—by sight, hearing and all available means.

Sometimes an extra lookout is needed, and it might be necessary to implement a watchkeeping schedule to ensure there's always someone on lookout duties.

Make sure the lookout has a clear understanding of navigational hazards. They should report to the watchkeeper so that risks can be identified and controlled in good time. This includes approaching vessels, things that don't look quite right anywhere around the vessel, other vessels moving unpredictably or debris floating on or under the water surface.



2. Keep your charts up to date

Arrange to get regular chart updates as soon as they become available. You may be familiar with the area and route you regularly navigate, but things can change—including depths, vertical clearances, the locations of cables, pipelines, navigational marks and lights, and restricted areas or port infrastructure.

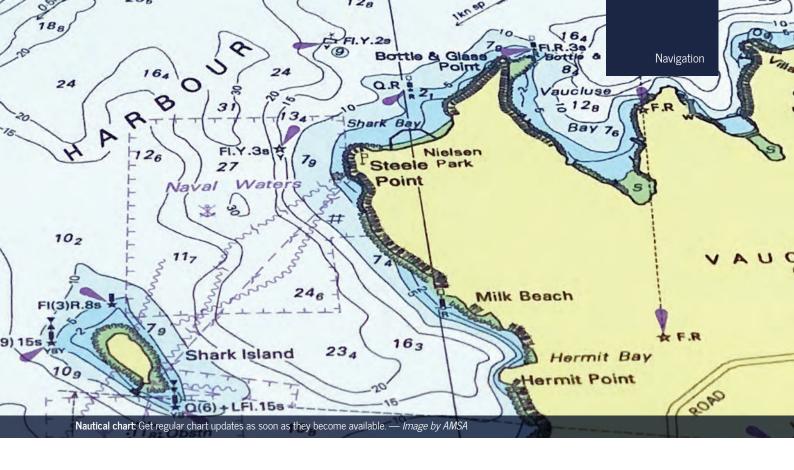
You should always know where your vessel is, relative to navigational hazards and your planned navigation route. With an electronic charting system, up-to-date charts, and Global Positioning System, you will always be able to monitor where you are.

Plot your position regularly on up-todate paper charts, so you know where you are relative to any hazards to navigation and your planned track.



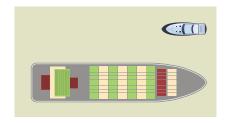
3. Communicate

Communication equipment is essential for situational awareness, avoiding collision with other vessels and engaging with authorities ashore—Vessel Traffic Services, port authorities, or shore-support organisations (ie volunteer organisations). Automatic Identification System (AIS) and marine radios are the most effective means of communicating your position, direction, speed and intentions to other vessels.









4. Watch the weather

Weather updates allow you to avoid—or minimise—navigating in rough weather conditions. Check the weather before you head out on the water. The marine and ocean section of the Bureau of Meteorology website provides a wide selection of regularly updated information, including surface wind maps, high seas forecasts and interactive weather and wave maps.

5. Manage fatigue

Crew fatigue contributes to many accidents. Fatigue affects everyone and can be as bad as being heavily intoxicated. Staying alert and aware of what is happening around you is crucial for effective decision making in safe navigation.

Most people need at least seven- to nine-hours of sleep each day. Multiple nights in a row without adequate sleep adds up over time, increasing fatigue.

The risk of fatigue is common to many operations and must be addressed in your vessel's safety management system. Control the risk of fatigue by scheduling adequate rest periods and create rest areas that are quiet with dimmed lighting. Encourage crew on watch to freely report fatigue so that it can be managed.

6. Follow the COLREGS

The International Regulations for Preventing Collisions at Sea—more widely known as the COLREGS—contain the rules that apply to all vessels and in all waterways connected with the high seas.

States and territories are responsible for waterway management within their regions, and will monitor and enforce compliance with the COLREGS.

bom.gov.au/marine

imo.org/en/About/Conventions/ListOf-Conventions/Pages/COLREG



Inside the AMSA Response Centre

On standby 24 hours a day, 365 days a year, the men and women in the AMSA Response Centre (ARC) monitor and respond to incidents across an internationally agreed area covering *one-tenth* of the earth's surface. We spoke to ARC Manager Alan Lloyd to find out what goes on behind the scenes and how a network of satellites assist search and rescue authorities to rescue people in distress.

By Sarah Cameron

Australia has the highest number of distress beacons per capita in the world, which we attribute to our love of getting out and exploring our vast country and surrounding oceans.

According to Alan Lloyd, the ARC receives around 5000 distress alerts each year and about 600 of these result in rescue operations.

The ARC receives distress alerts in a number of different ways. As the state and territory rescue authorities, the police are often the first to be alerted and they in turn alert AMSA, or people call for help by phone,' he said.

'But of the 600 alerts that actually result in rescue operations, around 80 per cent come from distress beacons or alternate technologies, such as Satellite Emergency Notification Devices (SENDs) and other means.'

Distress beacons are part of the international Cospas-Sarsat satellite system. This global system uses satellites to detect and locate distress beacons, known as EPIRBs, Personal Locator Beacons (PLBs) or Emergency

Locator Transmitters (ELTs). When distress beacons are activated, these satellites detect their signal and send the distress alerts coming from the Australian region to the ARC in Canberra.

'Once the distress alert is received, the ARC triages the information and comes to a decision about whether to task a rescue or not.' Alan said.

'Part of this triaging process is to check the beacon registration database and confirm with the police if they have any active incidents.'

Distress alerts include a unique code called a HEX ID.

If the distress beacon has been registered this code allows the ARC to identify the beacon owner and call their emergency contact to verify the situation,' Alan said.

If the answer is "the boat's in the back yard and the kids are playing with the distress beacon", we know it's an inadvertent activation and we don't need to act, but if we don't get that positive response we take further action.'

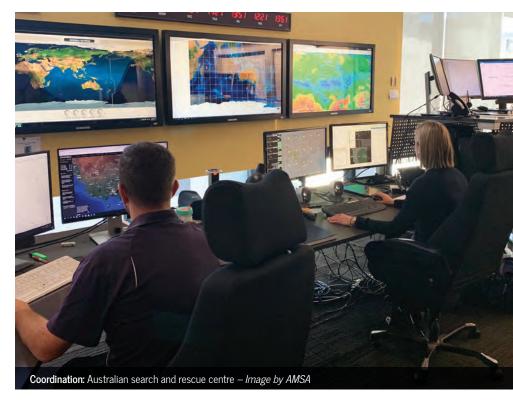
If it is a real distress situation, the emergency contact is often able to provide information critical to a successful rescue, such as trip plans, the number of people out fishing and any relevant medical conditions.

'In a real distress situation, the location provided by a GPS distress beacon activation takes most of the "search" out of "search and rescue," because we know exactly where to direct the search assets,' he said.

AMSA has four specifically modified search-and-rescue Bombardier Challenger 604 jets located around Australia ready to carry out these search missions, confirm the location of the person in distress and relay that location to other rescue aircraft or vessels.

'Each jet is fitted with new generation sensors, high-vision windows and air-operable doors for aerial delivery of life-saving supplies and equipment,' Alan said.

Once the Challenger is on location we can better assess the situation and brief rescue aircraft or vessels The ARC works closely with federal and state and territory organisations, and even private vessels or aircraft who happen to be near the location of incidents, to reach people in need as quickly as possible.



so they know what to expect and are appropriately equipped and ready to respond,' Alan said.

The ARC works closely with federal and state and territory organisations, and even private vessels or aircraft who happen to be near the location of incidents, to reach people in need as quickly as possible. Read about the rescue of three people off *Aurora* on page 27.

We have intergovernmental agreements between AMSA, state and territory police, and the Australian Defence Force, Alan explained.

When a rescue response is needed, we work with our state colleagues to decide who will coordinate the rescue and who will provide rescue assets, for example an ambulance helicopter and police rescue boat. These discussions happen daily,' he said.

If you are in the far-flung reaches of our search and rescue territory, it can take some time for help to arrive and you need to survive until a rescuer arrives.

Alan said there's a lot you can do to prepare for these situations.

Register your beacon and list your emergency contacts. Make sure they

are aware of your trip plans, including where you are headed, when you are expected to return, and any medical conditions of those on board.'

'Safety equipment is also important—lifejackets, two-way communication, food, water and medicine—and of course, good preparation for the trip before you leave. Monitor the weather and have realistic expectations of how long the trip is going to take.'

Read up on things to know before you go amsa.gov.au/before-you-go

Learn more about search and rescue in Australia amsa.gov.au/sar

BUREAU OF METEOROLOGY

Going boating? Do the five vital weather safety checks



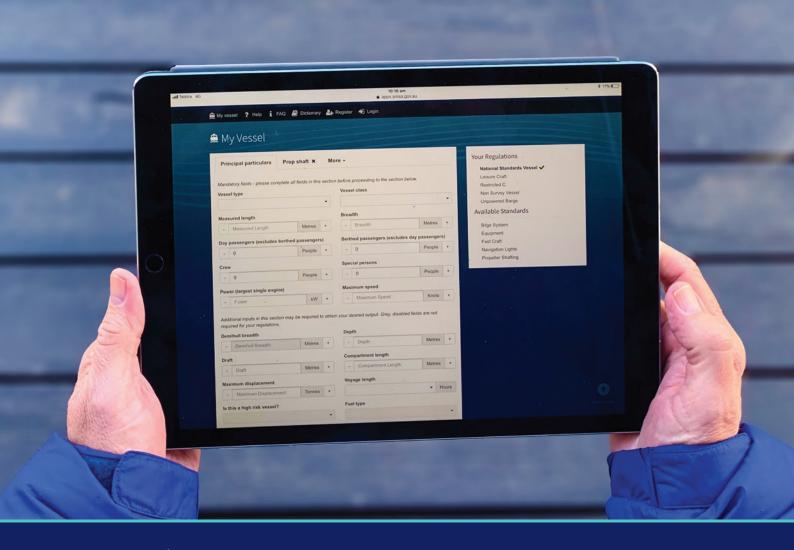
More info: www.bom.gov.au/marine

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YAMBA BACKS NATIONAL

SYSTEM



As one of Australia's leading commercial vessel builders, Yamba Welding & Engineering has been at the forefront of implementing the national system. We caught up with owner, Bill Collingburn, to find out what it means for his company. By Simon Enticknap

With more than four decades of boat-building expertise, Yamba Welding & Engineering, based at the NSW north coast regional town of Yamba, has established itself as one of Australia's leading commercial vessel builders.

As such, the company is well-placed to assess the impact of AMSA's National System for Domestic Commercial Vessel Safety and the effect of its roll-out, on the process of vessel certification.

Bill Collingburn said that while the system had its problems during the initial start-up, industry stakeholders had worked together to fix the issues and it is now working well.

'Everybody had to get on the bandwagon and make sure we all helped one another and I've had nothing but good feedback and help from AMSA, so we totally endorse the system. To get everybody on the same page so

vessels can move around Australia— I think it's pretty good.' he said.

While Bill is a qualified marine surveyor himself, he uses the services of an accredited marine surveyor—Rowan Curtis—based on the north coast, to carry out independent inspections and certification. Since 1998, the company has also been certified to ISO 9001:2015 for quality assurance with third-party accreditation from Bureau Veritas.

The systems put in place by the company have seen it grow to become one of the most sought-after suppliers of new commercial vessels. Last year, the company built about 15 vessels, which is expected to increase to about 20 this year and continue into next year with a healthy forward order book. Depending on the type of boat, a new build can take anything between eight weeks to a year to complete.

The company plays an important role in the economy of the Clarence Valley,

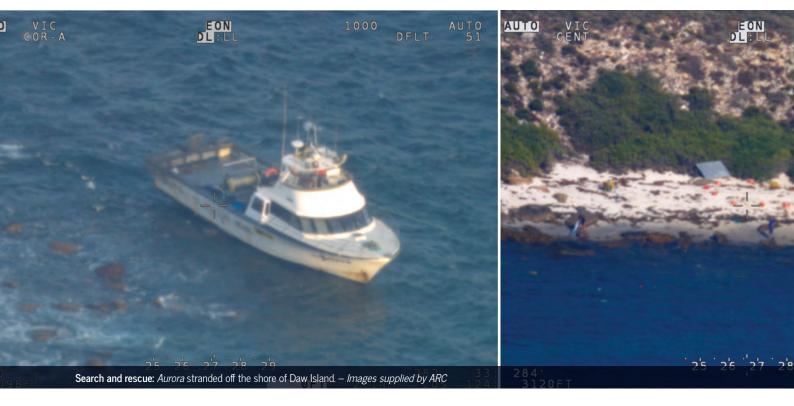
employing about 35 staff including a growing number of apprentices. Currently there are 11 apprentices learning a trade onsite, including one woman, and Bill expects to take on a couple more soon.

We have mature-age apprentices, people who have been made redundant in other industries, like dairy farmers, fishermen, people from the timber industry—people with life skills. They are very, very loyal, and we hire them alongside our school-leaver apprentices,' he said.

Current and future projects keeping the Yamba factory busy include five 5-metre police boats, 22-metre and 5-metre vessels for Department of Primary Industries Fisheries, two for Roads and Maritime Services and five for Marine Rescue NSW

yambawelding.com.au

ff @yambawelding



Aground on Daw Island

Responding to distress beacon activation is complex, shaped by prevailing conditions, location and whether there are casualties. One thing that makes all the difference for rescuers, is whether your beacon is properly registered and GPS-equipped.

By Daniel Redondo and Sarah Cameron

In the early hours of 12 May this year, AMSA coordinated the rescue of three cray fishers and their distress beacon played a key role.

The three cray fishers had activated their distress beacon when their 18-metre vessel *Aurora*, had dragged its anchor all night and run aground on Daw Island, 110 nautical miles off Esperance, WA.

When AMSA received notification of the distress alert at 1.25 am local time, we immediately identified that the beacon was registered and retrieved the information provided by the beacon owner.

The first thing our officers do is contact the beacon owner to verify the nature of the distress, but they were unsuccessful. Attempts to contact the other available emergency contacts were also fruitless.

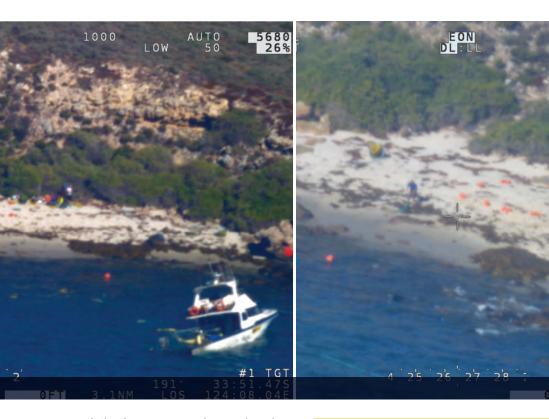
When this happens, we gather any information provided about the vessel linked to the beacon and ask local police if they are aware of the vessel being involved in any active incidents. On this occasion, local police did not have any active incidents involving the vessel—AMSA had been the first authority to be alerted to the incident.

Luckily, the distress beacon on the *Aurora* provided a GPS-encoded

position—the most accurate positon information to within 120 metres. With no way of contacting the owner, the emergency contacts, or knowing anything about the scenario, the GPS position was invaluable. AMSA collaborated with local rescue authorities and civilian vessels to reach and communicate with the people in distress.

AMSA officers immediately issued a broadcast to alert any other nearby vessels that the EPIRB on the vessel *Aurora* had been activated in the vicinity of Daw Island and may require assistance.

Our radio room established contact



with the three crew members on board *Aurora* via HF radio at 2.09 am and they advised that they were aground, but were all otherwise well.

AMSA then tasked the Perth Challenger search and rescue aircraft *RSCU 660*, which arrived on the scene at first light and established VHF communications with *Aurora*. The three fishers advised they were now taking water so the Challenger dropped a dewatering pump to help keep the vessel afloat. The pump was successfully recovered by the fishers and they began pumping water from *Aurora*.

Meanwhile the Fremantle Water Police had begun looking into the availability of vessels in Esperance, to task a vessel to recover the stranded crew from *Aurora*, but no vessels were near enough to rescue the fishers within an acceptable timeframe. As a result, AMSA tasked the Bunbury rescue helicopter *RSCU 652* to winch the three crew to safety with the Essendon Challenger *RSCU 330* providing top cover.

At 2.23 pm—approximately 13 hours after first detection of the distress beacon—all three crew were winched to safety.

Top cover

The purpose of 'top cover' is to task a second aircraft to provide additional backup safety measures in high-risk operations.

In this case, the winching operation took place in a remote location, so the Essendon Challenger was tasked to oversee the helicopter operation. If anything had gone wrong, the rescue aircraft would have been able to advise AMSA immediately and drop rescue materials to people in the water.

Register your distress beacon

Always register your distress beacon or change the ownership details. Make sure you list up to three emergency contacts when you register your beacon.

beacons.amsa.au

1800 406 406

GPS is best

GPS-enabled distress beacons can pinpoint your location to within 120 metres, but those without can only pinpoint your location to within five kilometres—a big difference when you urgently need help.

beacons.amsa.gov.au/purchasing/GPS-best.asp

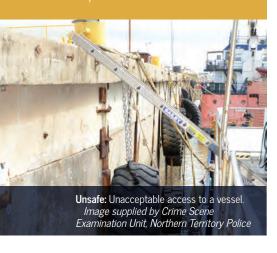
Unsafe access can have tragic consequences

A man tragically lost his life in the process of climbing down on to a barge in Darwin, Northern Territory in 2017.

The 34-metre barge was moored at a different location than usual, and although a gangway was available, the crew—who lived aboard the barge—simply jumped onto a tyre secured to the wall and climbed up onto the wharf. One crew member attached a length of rope to help crew climb back onto the vessel—only it wasn't enough.

With no gangway in place to bridge the gap, one of the crew lost his balance when climbing between the barge and the wharf, and fell into the water. The crew member was found dead in the water the next morning.

Following the NT Worksafe investigation and ensuing court case, the operator was fined \$190,000, while the master was fined \$20,000. But the real cost was the loss of the man's life, the irreplaceable loss suffered by the man's family and the personal impact on co-workers.





Safe access to vessels

Vessel owners and masters must provide a safe way of getting on and off vessels to reduce the chance of people falling and injuring themselves, or even drowning. This is a requirement under the national law general safety duties.

By Brad Roberts and Brad Milic

The requirement for safe access is often overlooked, particularly where there are limited berthing options, or a vessel is only berthed for a short period. Failing to provide safe access can result in a serious incident—even more so when bad weather or extreme tidal variation are thrown into the mix

In addition to national law requirements, commercial vessels need to address risks associated with falls under state and territory workplace health and safety regulations, including falls sustained getting on and off a vessel.

Managing the risks

- Assess the risks—What are they?
 What could make them worse?
 What could happen to a person as
 a result of this? How bad would the
 impact be?
- 2. Implement ways to control those risks. These might include:
- Building a safe gangway.

- Limiting access in bad weather and if necessary, during extreme tidal variations.
- Providing lighting around the gangway at night to increase visibility.
- Securing gangways clear of the wharf edge, or other potential hazards.
- Including instructions on when and how to safely board the vessel—and when not to—in your crew safety inductions. Under the general safety duties, crew and passengers must follow this instruction.
- Encouraging your crew to report hazards associated with getting on and off the vessel.
- Developing emergency procedures for any possible incidents associated with getting on or off the vessel ie falls, man overboard.
- Documenting these risks and controls in your safety management system and reviewing them periodically to make sure they are still relevant and practical.



Are the alterations on your vessel above board?

Transitional vessel arrangements offer a more considered and staged approach to updating a vessel, but there are still pitfalls for those not familiar with the standards. Talking to your accredited marine surveyor before getting started can save you effort, time and money in the long run.

By Simon Anderson

View the existing vessel to transitional vessel flowchart amsa.gov.au/transitional-vesselflowchart

Survey standards for domestic commercial vessels in survey amsa.gov.au/survey-scheme-s

Marine Order 503—Certificates of survey–national law amsa.gov.au/mo503-certificatessurvey-national-law Over 67 per cent of Australia's domestic commercial vessel fleet meets the definition of an existing—or grandfathered—vessel under *Marine Order 503* (Certificates of survey—national law).

Grandfathered vessels must comply with the construction and stability standards that applied to the vessel when it was last surveyed prior to 1 July 2013, but if owners make a change to their grandfathered vessel, it can trigger the vessel to become a transitional vessel.

An existing vessel can lose its grandfathered vessel status and become a transitional vessel in two ways—either it has not held a valid certificate of survey for more than two years, or it has undergone certain types of changes. These changes include:

- adding or upgrading a class
- changes to geographical restrictions or certain operations
- changes to vessel structure, systems, displacement or configuration
- increasing the number of people on board
- carrying dangerous goods.

When we developed the standards and survey requirements for transitional vessels, AMSA set out to create a system to allow existing vessels to make changes in a considered and achievable way, rather than having to meet the requirements of a new vessel all at once. As a result, the transitional

vessel standards are a combination of the National Standard for Commercial Vessels and its predecessor, the Uniform Shipping Laws code. Exactly which transitional standards apply depends on the type of vessel and what change the vessel has undergone.

Transitional vessels must meet transitional standards, irrespective of class or operation type. This may mean that the parts of the vessel—or equipment—while not directly affected by any work done on the vessel may still need altering to meet the transitional requirements. This is where consulting an accredited marine surveyor before you undergo the changes may save you time in the long run.

All vessels entering transitional vessel arrangements must obtain a new certificate of survey. If you aren't fully aware of what the impact of any changes may be it's best to check first—you may need to make additional changes before the vessel passes survey and can be issued a new certificate.

Transitional vessels have to do one of three types of survey, depending on the type of change they have undergone.

- Full initial survey in accordance with the three phases of initial survey—plan and stability approval, construction and commissioning.
- Renewal survey to transitional standards, plus limited initial survey for areas of the vessel affected by the change.
- Renewal survey only (in water, out of water, lightship check, shaft survey, periodic load line) to the transitional standards.

Tides of change for women in maritime

Tongan maritime student Hulita Fa'Anunu talks to AMSA about influencing positive change for women in the international maritime industry.

By Becca Posterino

At the age of 26, Hulita Fa'Anunu from Tonga has a bold ambition, she plans to turn the tides for women within the maritime industry globally.

This year, the theme for World Maritime Day 2019 is empowering women in the maritime community and soon-to-be graduate of the World Maritime University, Sweden (WMU)—Ms Hulita Lamasialeva Fa'Anunu from Tonga—is a clear example of an empowered woman on a positive path for change.

Hulita was born in Neiafu on the island of Vava'u—with a population of 6000 people, Neiafu is the second largest town in Tonga. The eldest daughter of four children, she grew up on the coast. Alongside family, Hulita explored life with a vast community and her extended family—roaming beaches, swimming, fishing and sourcing food from local farms on the island.

Fishing has been important for the family and community for as long as I can remember, from my great grandfather until now and for the whole community of Tonga,' she says.

One of Hulita's fondest memories was gathering with family in December, often the only time they could be together each year. Family is at the heart of the Tongan community and women and girls have a distinct role and for Hulita, these values impact her work in the maritime industry in Tonga.

The most important issue is gender equity, and the problem in Tonga is people still think that women aren't supposed to be in the maritime industry,' she says.

However, studying in Sweden has enabled Hulita to reflect on the cultural norms of Tonga and now she is determined to influence positive change for women within the maritime industry in Tonga and globally.

Funded by Australia as part of the AMSA Fellowships program to study an MSc (Master of Science) in Maritime Affairs at the WMU, Hulita is the only female fellow and back home, she works as a Fisheries Officer with the Tonga Ministry of Fisheries.

I feel extremely lucky and humbled to have been selected as one of the recipients of the Australian Maritime Safety Authority Fellowships to study in Sweden,' Hulita says.

As part of her experience in Sweden, Hulita has studied with a number of professors whose expertise in their field of research has exposed her to international standards and progressive research within the maritime industry. Hulita has also enjoyed studying with students from all over the world.

A particular highlight was attending the Women's Forum at WMU, a conference where women met to share personal stories working in the field of maritime.

'This was a remarkable conference and very informative. Women met to talk about their experiences in the field and I realised the importance of working together,' Hulita says.

As a participant of this event, Hulita experienced first-hand the power of personal agency and the importance of collective action to help address the gender gap in the maritime industry.

'At university, I have gained experience inside the classroom, attending the women's conference and participating on field trips. WMU has a wonderful President, Cleopatra Doumbia-Henry, who always reminded me of the importance of empowering women,' Hulita says.

In the future, Hulita has grand plans to apply her studies in maritime science to raise public awareness of the apparent gender gap by empowering young women to embark on careers in the maritime industry in Tonga and internationally.

Hulita believes challenges give life meaning and working hard while navigating positive change for women has inspired her to strive for success in the maritime industry.



Women in MARITIME

By Desiree Caira



Megan Arnott

NSW Marine pilot

Megan's interest in the shipping industry was sparked by watching cruise ships growing up, but her career started with the Australian Maritime College (AMC).

'I went to the AMC, completed my pre-sea training, found a cadetship on a little chemical tanker, and my interest and achievements in the industry only grew from there,' Megan said.

I love the everyday challenges that this job and industry brings—no two days are the same and every day is interesting. It is such a dynamic environment with so many aspects to manage—weather, people, traffic and commercial.'

On whether being a female in this industry makes it harder to get by, Megan is philosophical.

'I don't think being a minority in the industry drives me. I think even if I was part of a majority group, my personal pride would still be pushing me to be my best,' she said.

To anyone looking at going into the industry I would absolutely say "go for it". If you are truly passionate about the industry you will find a truly satisfying, adventurous career, where you will be also rewarded with lifelong friends.'



Justine Arnold

Marine biologist

Immersed in the maritime industry her entire life, Justine always knew she wanted to spend her life doing something involving the ocean.

'My father is a cray fisher at the Abrolhos Islands, Western Australia, where my family lived for four months every year and my sisters and I attended school,' she said.

Justine started out as a fish feeder and deckhand, and studied for her Bachelor of Marine Science and Environmental Management, before completing her marine science honours, and working her way up to her current role.

I oversee farm operations, including health monitoring of the fish, environmental monitoring and feeding, diving, cage maintenance and fish husbandry,' she said.

'My marine science degree and current job allows me to spend half of my time on the ocean and half of my time on land—I am very lucky!' she added.

'I suffer seasickness quite badly so I knew a life solely on the ocean wasn't for me.'

'I love working on the ocean. No two days are the same. There is so much life teeming under the surface and I enjoy observing the power of the ocean—it's unforgiving and relentless at times.'

We got in touch with four women to ask them how they got into their maritime profession and what they love about it.



Dr Kirsten Abernethy

Social scientist

Kirsten's aim has always been to work with the fishing industry and fishing families.

There is a romance about fishing—fishers are the last of the hunters and from the moment I stepped onto a professional fishing boat I knew I'd found my calling,' Kirsten said.

I'm a social scientist and I've worked with wild-catch fisheries and fishing communities for more than 10 years as a researcher, teacher and advocate,' she said.

Her work has taken her around the world from Cornwall in the UK, to the Solomon Islands and Timor Leste, but Kirsten now lives and works from Port Fairy, south-west Victoria.

I offer consulting on a variety of projects, such as determining the value of fisheries to local communities, helping build greater support for Australian fisheries, and examining the wellbeing of fishing families,' she explained.

'My favourite part is when I get to go fishing. I've been deck-handing with my partner who is an abalone diver and love it even though it's exhausting work.'

I've also had the chance to go to sea on a variety of trips from eight-day stints on trawlers 80 miles offshore, to line fishing in a canoe, but the thing I really love is talking to older fishermen and women and listening to their stories.'



Claire Webber

Tuna industry research and liaison officer

Claire's interest in maritime started in year 12, while studying marine biology. From there she obtained a Bachelor of Administration (Marine Resources)—a fisheries management degree.

'After university I moved to New Zealand and worked for the Ministry of Fisheries as an observer. I would verify catch independently, collect data to underpin the quota management system and undertake marine mammal and bird observations,' she said.

These expeditions took Claire all over New Zealand, and down to the Auckland Islands on the way to Antarctica.

'Often I would be the only female and English speaker on board and it was a real culture shock, but I had a sink or swim moment when I thought "the NZ government thinks you can do this, so get on with it"," she said.

'Working on the Russian trawlers was another character forging experience,' she added.

Claire said that another great highlight in her career was when she was awarded the National Seafood Young Achiever Award at Seafood Directions in 2015.

Now as the research and liaison officer for Australia Southern Bluefin Tuna Industry Association, Claire is heavily involved in hands-on operations in the aquaculture industry.

This includes management of the research program, industry data collection on fish health, water monitoring and environmental conditions, licencing and policy, marketing and industry promotion,' she said.

I love the diversity of the role—working on a tuna harvest one day, cutting up guts for scientific sampling on another, meeting dignitaries at a luncheon, data entry and reporting—there's such a variety of work to do.'

Remembering the lives lost with the sinking of MV *Noongah*



Fifty years have passed since the coastal ship MV *Noongah* sank some 12 miles off Smokey Cape, NSW, tragically taking 21 lives of the 26 crew members.

By Marion Wilde

The fated vessel departed Newcastle on 23 August 1969 with a cargo of steel bound for Townsville, but soon struck catastrophic conditions off the coast of Smoky Cape in mid-north New South Wales, with 110 kilometre winds, 30-foot waves, heavy rain and hail.

During the storm, the vessel developed a list when the cargo shifted, causing the vessel to take on water. Despite efforts to stem the intake of water, the crew were forced to abandon ship in the early hours of 25 August.

Over the next four days five destroyers, three minesweepers, seven aircraft, two helicopters and a number of other vessels searched for survivors, but only five of the 26 crew were located.

Two survivors had escaped by life raft. Three others were found clinging to a plank and taken to safety aboard the *Meringa*, but the remaining 21 seamen were lost.

At the time, the incident was considered the worst maritime

peacetime disaster in Australia's maritime history. Although over time this incident has faded into Australian history and lost to generations, the memory has remained clear and painful for myself, my family and I am sure for the other families who lost a loved one in the event.

The Seaman's Union was very strong in those days with support and condolences arriving from within Australia and around the world. Street marches and memorial services organised by the seven sea-going unions were conducted around the nation in all major ports and on all Australian vessels on Monday 8 September.

A disaster fund was established and a marine inquiry ensued. The inquiry determined that the incident was not the fault of the crew but the details of what happened would never be accurately answered.

My personal story

I was 20 years old with two young children when my 22 year old older

brother Patrick Kilgariff was lost when the *Noongah* sank. Pat and myself had been very close all our lives and with only two years separating us many people thought we were twins.

He had been in the merchant navy for several years and was an Able Seaman. My oldest brother James (Jim) was also in the merchant navy at the time and remained so until he retired.

Our father had died just over a year before the sinking of *Noongah*, which we were all still recovering from.

The world was very different 50 years ago and communication was not what it is now. At the time my husband and I did not have a phone so a neighbour came to my home to say mum had phoned asking me to go to her.

Initially we were stunned but hopeful that Pat would be found. But as the search went into days with no result, we lost some of our resolve.

Mum, already drained by dad's illness and resulting death, found it hard to cope with the strain of losing and not finding her son, especially with having two younger sons still at school and The worst part of this disaster for us as a family is that we never found Pat. so it has never been resolved. The loss of a son and brother has affected us individually in different ways.'

-Marion Wilde

needing care. We had immigrated from England in 1959 and had no extended family to give support, so the task of caring for mum, looking after my two younger brothers and managing the situation fell to me.

We did not know Pat's shipmates and had no personal contact with anyone who could tie him to us. We lost touch with his close friend I knew as 'Malto' not long after we lost Pat. I have often thought that I would try to find him but never have.

The worst part of this disaster for us as a family is that we never found Pat, so it has never been resolved. The loss of a son and brother has affected us individually in different ways.

Mum never stopped looking for Pat, especially when she was near the sea. When she died aged 94 in 2016 my three brothers and I scattered her ashes at sea, where we felt her spirit would be reunited with Pat's.

For the first 30 or so years I would also look for Pat and often thought I had seen him. At some stage I stopped actively looking for him. I figured that my head must be right and he was lost in the sea or that if he was alive, he didn't want to be found.

My heart never completely believed this though.

Noongah loss mystery

The loss of the coastal freighter Noongah would go down in the history of Australian merchant shipping as a mystery, a court of Marine Inquiry was told yesterday.

Mr. O'Bryan, counsel for the Department of Shipping and Transport, was summing up evidence in the final stages of the court inquiry into the loss of the Noongah which sank in high seas off the northern coast of NSW last August with the loss of 21 lives.

Mr. O'Bryan said respon-sibility for the Noongah disaster did not fall on any one man, body or organisa-

"Without knowing the true cause of the Noon-gah's foundering, it would be wrong to label anybody negligent," he added.

But he said it demon-strated the need for more advanced life-saving train-

ing for seamen.

"Chance, not skill, saved the survivors," he said.

"And ignorance cost the lives of many of the crew."

Mr. O'Byran said the Noongah foundered because enough water entered its

forward hold to sink the

ship.

It was impossible to determine how the water got in, he said.

Impossible

"It is now quite impossible for the court to determine whether the disaster was man-made, or an act of God," he said.
"Survivors stories tend to show that the Noongah had a normal voyage, until an undetectable and unforseeable catastrophe over-

seeable catastrophe took her."

It would be wrong to blame or censure the ship's owners (Australian National

owners (Australian National Lines), or the organisation who issued the Noongah certificates of seaworthiness (Lloyd's Register of Shipping) he said.

And he said that the heavy loss of life in the disaster was "related to the extreme weather conditions at the time of the Noongah's foundering, not to inadequacies in lifesaving equipment." nadequacies in life-saving equipment."

Some of the Noongah's crewmen had not trained as well as might have been in proper use of the s life-saving equipment. they ship's

"It appears more couragement should couragement should be given to owners to train seamen they employ, and seamen must be given incentives to learn to use the equipment," he said.

He also suggested that in future all inflatable life rafts be equipped with an electronic signalling de-vice that rescue ships

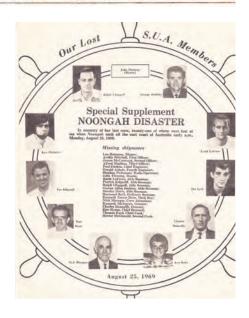
"An inflatable raft is not easily manoeuvrable, and it merely drifts at the will of the wind and current," he said.

"We need to consider installing some sort of radio device into these

radio device into these rafts to bring rescue parties more speedily."

The inquiry will continue today before the Chief Jus-tice of the Commonwealth-Industrial Court, Sir John

Clockwise: Patrick Kilgariff was lost at sea; In the news: Noongah loss 'mystey at sea'—council, The Age, Wednesday, December 10, 1969; Special supplement: In memory of those lost in the Noongah tragedy.





Your questions help us provide better information about meeting safety requirements and how to access our services. Here are some of the questions received at industry events over the last few months.

1. Can I take a distress beacon on the plane?

Every airline has different carriage requirements for products containing lithium batteries. We recommend you contact the airline you are travelling with for guidance. Ask the airline if the beacon should be packed securely in your checked in luggage or if you can include it in your carry on luggage.

If you are thinking of taking your beacon overseas, be aware that in some countries it is illegal to carry and use PLBs on land.

To find out more about beacons in the country you are travelling to, search the Cospas-Sarsat website for the best contact in that country. Make contact with the contact provided for that country to find out whether you are allowed to use your beacon in that region and whether a search and rescue response will be initiated if you activate your beacon.

cospas-sarsat.int/en/beacon-ownership/national-beacon-regulations-for-serial-coded-plbs

2. Is there a distress beacon in Australia that is both PLB and AIS in one?

No. Combined 406 MHz and AIS PLBs are not currently available anywhere in the world. However this type of second generation PLB is in development and is expected to be available on the market in the next 2–4 years.

Until then you can purchase a 406 MHz PLB and Man Overboard AIS devices independently.

The distress signal sent from a 406 MHz PLB is detected by satellite and forwarded to the AMSA Response Centre (ARC), which initiates a search and rescue response.

Distress signals sent from a Man Overboard AIS device can only be received by other vessels within VHF range with an AIS receiver installed. Man Overboard AIS devices cannot be registered with AMSA and do not meet the 406 MHz PLB AS/NZs 4280.2 standard.

3. Can an MMSI be associated with more than one boat?

No. A single Maritime Mobile Service Identity (MMSI) can only be allocated to one vessel, which may have a fixed VHF DSC, HF DSC or AIS installed on board. The MMSI number is programmed into each of these fixed devices so that one vessel identification transmits from the vessel regardless of the device being used. The exception to this is handheld VHF DSC radios. Each handheld VHF DSC radio on a single vessel must have its own MMSI number.

Learn more about MMSIs at amsa.gov.au/mmsi

4. What happens when VHF DSC distress is activated?

Very high frequency digital selective calling (VHF DSC) is monitored on a voluntary basis in Australia, except Victoria. VHF DSC is for local alerting and response within VHF range of another vessel, or a land-based station monitoring VHF.

We recommend if you operate in a particular area, to contact your local coastguard to find out what hours their station is manned and log your trip details.

To use the VHF DSC press the red button labelled 'Distress' or 'Emergency'. The DSC alert transmits your MMSI number—and if the equipment is GPS equipped, also your latitude and longitude—via channel 70. Then you need to communicate the nature of your distress on Channel 16 (such as 'Mayday' or 'Pan Pan'). If no one acknowledges your call then you should consider alternative methods of communicating your distress, including flares or a 406 MHz EPIRB.

5. How can I prove sea time for a ticket?

You can provide evidence of sea service in the following ways:

- the Record of sea service form (AMSA 771)
- · an approved sea service log book or task book
- a letter from the operator, owner, master or chief engineer of the vessel you have worked on, detailing the sea service. This letter must address the information requested in the Record of sea service form.

If you can't get a supervisor signature on the Record of sea service form, we may accept a statutory declaration along with the form. In the declaration you must declare the information provided in the form is true. You must also explain why we should accept a statutory declaration instead of a supervisor signature.

Recognition of other types of sea service not recognised by *National Standard for Commercial Vessels Part D* is done on a case-by-case basis according to the:

- · duration and frequency of voyages
- · kind of duties performed and their duration and frequency
- · level of responsibility during the service
- relevance of the service to the certificate of competency applied for.

You should provide details and evidence of this service in your application.

Read more about qualifying near coastal sea service at amsa.gov.au/qualifying-near-coastal-sea-service

View the Record of sea service form (AMSA 771) at amsa.gov.au/forms/record-sea-service

2020 sulphur fuel limit

From 1 January 2020 all vessels must use fuel that contains no more than 0.50 per cent sulphur.

While heavy fuel oils used by larger vessels contain higher sulphur levels, most diesel and petrol sold in Australia as marine fuel already contains less than 0.50 per cent.



Checking your fuel's sulphur content

If you aren't sure about the sulphur content of your fuel, check with your supplier.

If your vessel is 400 gross tonnage or above, your supplier must give you a bunker delivery note with each fuel delivery which includes the sulphur content of your fuel.

Your supplier also needs to be registered with AMSA.

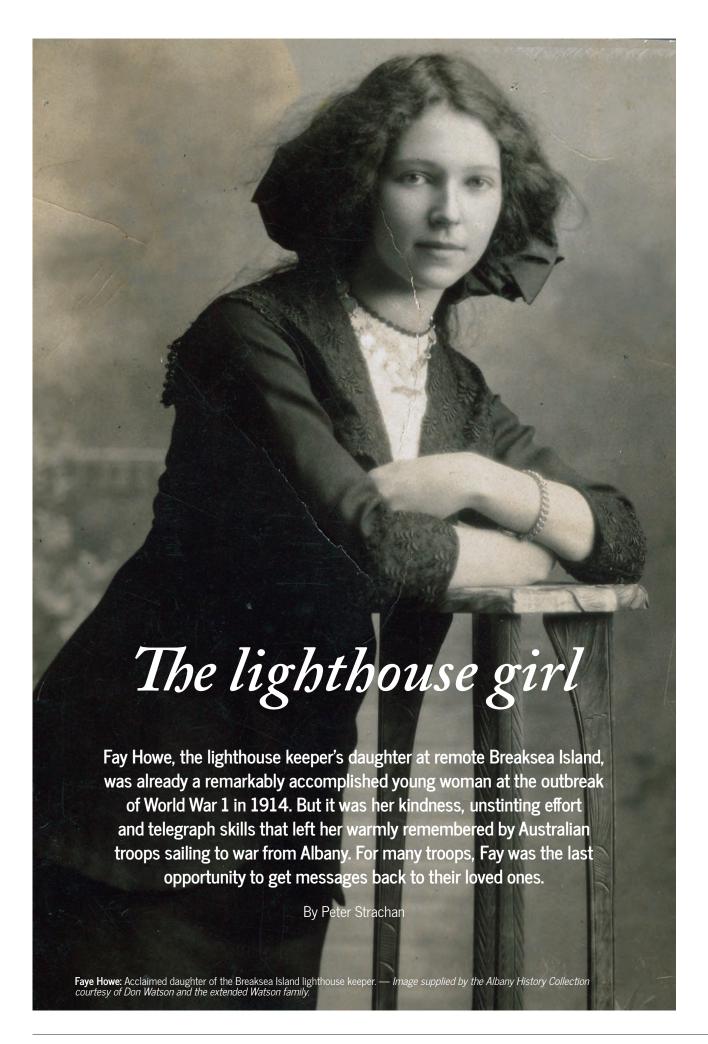
Carrying fuel with a sulphur content above the limit

In addition to the 1 January 2020 sulphur limit, from 1 March 2020 fuel with a sulphur content of more than 0.50 per cent sulphur cannot be carried on board.

This doesn't apply to fuel carried as cargo.



To find out more about the changes, visit amsa.gov.au/air-pollution





For many, Breaksea Island was the last point of Australia they would see on their journey to the war, and many soldiers felt the need to send a last message to loved ones left behind. Being strategically placed on Breaksea Island and skilled in telegraphy, Fay became their messenger.

Fay was born in 1899 at Cape Leeuwin Lighthouse, on the south-west tip of Western Australia. She was the youngest of Robert and Hannah Howe's four children and was just six years old when her father was transferred to Breaksea Island.

Little was known of her early life, until author Dianne Wolfer began research for her book *Lighthouse Girl* in 2005.

'Even then, a lot of what we now know emerged years after the release of the book, with help from Fay's descendants,' Dianne said.

A statement issued by family says that when Robert was appointed lighthouse keeper at Breaksea, only Fay and her parents moved to the island. The couple's three older children, Harold, Evelyn and Ada, remained in Albany with relatives for their schooling.

As Fay grew up she became proficient with a gun and was soon able to contribute to family meals with mutton birds and rabbits. She also collected stinging nettles—often the family's main green vegetable.

Fay became remarkably capable in many aspects of life—a very accomplished and confident young person. Her parents taught her to read, write, do arithmetic, crochet, sew and cook. They also taught her signalling with flags, semaphore, Morse code and telegraphy.

In 1913, when Fay was 13, her sister Ada gave birth, but died from a lung disease soon after. The baby, Stanley, was taken out to the island for Fay's mother to rear, but unfortunately their mother died early the following year, leaving Fay to raise the child.

Around this time, shipping activity in Albany had increased dramatically. The first Australian Imperial Force fleet was formed to carry Army troops, horses and supplies to World War 1 battle theatres, and it was at this point that Fay's acts became the stuff of legends.

For many, Breaksea Island was the last point of Australia they would see on their journey to the war, and many soldiers felt the need to send a last message to loved ones left behind. Being strategically placed on Breaksea Island and skilled in telegraphy, Fay became their messenger.

Barely into her teens and with her sister's baby to rear, adding to the demands of life on windswept, isolated Breaksea Island, a tireless and highly competent Fay transmitted many of their messages back to the troops' families.

'It's not hard to imagine the thoughts of the soldiers aboard the ships, desperate to send a final message home to families on the eve of sailing and being unable to get ashore to a telegraph station or post office,' Dianne said.

'Some soldiers even wrote farewell messages which they put into bottles to throw overboard. Others signalled in any way they could, in the hope their messages would get through. And for many, they did, thanks to Fay.'

Afterwards, grateful soldiers sent postcards back to Fay, warmly thanking her for relaying their messages to their

loved ones. For too many, of course, Fay's transmissions were the very last messages they were ever able to send home—the treasured postcards Fay received were kept in a drawer, but have since been lost.

In 1915, James Watson was sent to Breaksea as a relief lighthouse keeper and he and Fay were married in December 1916. The couple bought a house on Duke Street, in East Fremantle, Western Australia, where Fay lived for most of her adult life. They had five children, three of whom—Doreen, Marjory and Don—survived to adulthood.

After James died in 1946, money was very short so Fay turned her skills to dressmaking and later became a wardress at Fremantle Women's Prison in the 1950s.

Fay's 'can-do' attitude led her to success against the many and varied challenges she faced in her life. At the time of her death in 1968, Fay left behind three married children and nine grandchildren.

Her generous spirit and willingness to help the departing soldiers is remembered in the book, *Lighthouse Girl* and the family statement can be found on Dianne's website.

diannewolfer.com

Breaksea Island lighthouse

Breaksea Island Lighthouse, at the entrance to King George Sound, Albany, was built by convict labour in 1857, making it one of the earliest to come into service in Western Australia the following year.

By Peter Strachan

The current structure stands on the site of the original lighthouse, selected by Royal Engineer Captain Henry Wray, at the centre and highest point on the island.

The original lighthouse cost £637 (\$1274) and consisted of a cast iron tower of prefabricated panels, built on a hexagonal sandstone and brick building with a corrugated iron roof. Construction materials for the lighthouse and its 13-metre tower were brought from England.

The light, 383 feet above sea level, had an expected loom of 23 nautical miles and with a second order catadioptric unit equipped with oil burners, it was recorded as visible for 30 miles.

But concerns were soon raised about the inefficiency of the light and the incompetence of its keepers. And when supplies of polish ran out and an inferior product was used on the reflectors, they were permanently damaged, reducing the light's effectiveness. There were also safety issues

At the time, Breaksea was an important signal station, both for navigational safety and for getting messages through to the mainland related to maritime traffic. Initially, signals were conveyed by flags, balls and cones on a mast until replaced by semaphore messages in 1869 and a connecting cable to the telegraph office in Albany in 1896.

Constant complaints about the light's inefficiency resulted in a decision to build the present lighthouse in 1901, complete with a separate keepers' cottage and new jetty. The tower was 24 foot tall (7.3 metres), built from local granite and brick at a cost in excess of 7000 pounds (\$14,000).

Its first order light, a 13,000-candlepower lantern with a six-wick burner came into service in 1902. It was initially powered by colza oil and kerosene, but when it was automated in 1926 it was converted to acetylene gas. It is now solar powered and continues to provide a valuable service to mariners.

Information for this report has been provided by Sue Lefroy, of the Albany History Collection.



2019 Australian Search and Rescue Awards

Recently the Australian Search and Rescue Awards recognised 25 people's outstanding contribution to search and rescue within the Australian region. The Awards were hosted by South Australia Police and presented by Mr Mark Morrow, Chair of the National Search and Rescue (NATSAR) Council.

By Kim Daniels

AMSA General Manager of Response and NATSAR Council Chair, Mark Morrow said the selfless and brave actions of this year's recipients in the face of imminent danger is nothing short of inspiring and worthy of national recognition.

Their willingness to respond and the ability to maintain a calm and measured approach when confronted by danger, is a testament to the character of these recipients,' he said.

When someone is faced with a choice to take action or not, we see what people are made of—their bravery, professionalism and dedication are truly inspirational. These recipients have an enormous capacity to hold focus in spite of the risks and as a result six people are alive today because of their actions.'

There are two categories of awards, with each category including a commendation award:

Professional—an individual or organisation trained within the search and rescue field.

Non-professional—an individual, group or organisation.

Professional search and rescue award

On 11 February 2019, the Tasmanian Police rescue helicopter team winched a 26-year-old male climber to safety when he suffered spinal injuries attempting to cross from Totem Pole back to Cape Hauy, in Tasmania's Tasman National Park.

Recipients: Senior Constable C Williams, Constable N Mackintosh, Paramedic E Byers, Pilot C Fahey, Senior Constable C Herbert, Constable A Oakden, Constable C Rennie, Constable P Vanderwal.

Non-professional search and rescue award

On Sunday 21 April 2019, five individuals saved a woman who had fallen from the top of Parsons Falls—near Lake Mackenzie in Tasmania—suffering significant injuries. The lifesaving assistance they gave the patient before the arrival of emergency services saved her life.

Recipients: Athol Stuart Beer, Stewart John Geard, Craig Charles Neville, Anita Denholm, Kade Wooldrage.

Professional search and rescue – commendation award

On Sunday 14 April 2019, the Port Macquarie Volunteer Marine Rescue (VMR) saved three men—all with serious injuries—from a sinking vessel that had hit rocks along the mid-north NSW coast.

Recipients: Garry White, Graham Gibbs, Reg McGlashan, Yolanda Bosschieter, Tony Hallett, Chris Condon, Bill Richardson, Rob Breskal, Owen Coulls, Randall Gawne, Greg Davies.

Non-professional search and rescue – commendation award

On 13 January 2019, Mark Sampson risked his own life to save the life of his friend, when their catamaran capsized, throwing them into the water one kilometre off the coast of Point Vernon. Mark risked his own life by swimming back to shore to raise the alarm in order to save his friend.

Recipient: Mark Sampson

Read more about the rescues at amsa.gov.au/SAR-awards-2019 NATSAR Council natsar.amsa.gov.au



Sam Lush, Palmerston, NT

'I carry five self-inflating lifejackets stowed away.'



Malcom Barry, Sydney, NSW

'We carry level 100 PFDs, and also level 50 PFDs.'



Julie Lutchmal, Marlow Lagoon, NT

'We've got six coastal lifejackets on our boat.'



Chris Dunn, Johnston, NT

'On my boat I have selfinflating lifejackets.'

What life jackets have you got on your boat?

In Sydney and Darwin we asked what lifejackets you have on your vessel.

This is what you said...



Suzie Freed, Darwin, NT

'On my boat we've got coastal lifejackets for visitors—not the kapok jackets—and my husband and I have newer lifejackets for ourselves.'



Murray Flynn, Pittwater, NSW

'We carry a range of lifejackets. We are in the process of buying some 150 inflatables and we've got about a dozen type 1 lifejackets as well.'



Geoff Picker, Port Macquarie, NSW

'I have a range of lifejackets on my vessel, from SOLAS right down to children's sizes.'



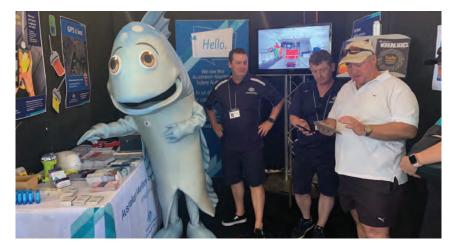
John Nichols, Mt Waverley, VIC

'We use Stormy inflatable lifejackets for ourselves and we have static jackets for visitors.'



Dean Cropp, Sydney, NSW

The lifejackets I use on my charter vessel are a bum-bag coastal type—they are the right type for my AMSA requirements but the reason I chose those is that they are so similar to an aircraft-style lifejacket. I always do a passenger induction on the boat, but in an emergency people will have that added familiarity with these lifejackets.'









This winter we have been busy meeting people, answering questions and registering beacons at boat shows and industry events all around the country.

Since the last edition of *Working Boats*, the event trail has led us to the Sydney International Boat Show, Hervey Bay Seafood Festival, Bundaberg Oceanfest, Cairns Marine Awareness Day, the Fenacle festival in Karratha, the NSW Oyster Growers Conference and the Darwin Boat Travel and Leisure Show.









Treat your beacon like a mobile phone

Protect it from

theft



electrical and magnetic devices



high-pressure water sprays



anything that can knock the activation switch



children who may play with the beacon



compasses







For more advice on beacon storage amsa.gov.au/beacons 1800 406 406